NRG Energy, Inc.
P.O. Box 1001
1866 River Road
Middletown, CT 06457

March 6, 2012

Mr. Gene Shteynberg
CT Department of Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106

Subject: Semi-Annual Site Status Update
Middletown Station, Middletown, CT

Dear Mr. Shteynberg:

Middletown Power LLC respectfully submits the enclosed Semi-Annual Site Status Update prepared by Shaw Environmental & Infrastructure, Inc. (Shaw) for the Middletown Station. This update presents environmental activities completed for the site between August 2011 and January 2012.

Please contact Andrew Walker at Shaw with any questions or for additional information at (617) 589-6143 or via email at andrew.walker@shawgrp.com.

Sincerely,
Middletown Power LLC

Jeffrey Araujo
Plant Manager

Cc: K. Shortsleeve, Middletown Power LLC
B. Spooner, NRG (electronic)
A. Walker, LEP, Shaw (electronic)
File

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March 6, 2012 Project #: 1009634015.24

Mr. Gene Shteynberg
CT Department of Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106

Subject: Semi-Annual Site Status Update
Middletown Generating Station
Middletown, CT

Dear Mr. Shteynberg:

On behalf of Middletown Power LLC, Shaw Environmental & Infrastructure, Inc. (Shaw) has prepared this letter to provide a semi-annual site status update for the subject site. In addition, Shaw is providing the Connecticut Department of Energy & Environmental Protection (CTDEEP) with a schedule for continuing environmental activities at the site.

2011/2012 ACTIVITIES

Environmental assessment activities completed at the site between August 2011 and January 2012 include one groundwater monitoring event, SB-1 Engineered Control (EC) completion, and SB-1 EC inspections. The results of the sampling event and SB-1 activities are discussed in more detail below. Drawings, tables, and other supporting information are included in the attachments as necessary. Other environmental activities completed for the subject site during this reporting period include the following:

- A request for approval to use the Additional Polluting Substance (APS) Draft Criteria "2005 List of APS Criteria" for select substances and for approval to use extractable total petroleum hydrocarbons (ETPH), as an Additional Polluting Substances was submitted to the CTDEEP on September 29, 2011. The request was approved by CTDEEP on December 1, 2011.

- The Site-Wide Remedial Action Plan (RAP) was prepared and submitted to CTDEEP in October 2011. The public notice was published in the Middletown Press on October 18, 2011 and the 45-day public comment period ended December 1, 2011.

- A tentative meeting date of October 2011 was selected for NRG Energy Inc., CTDEEP, U.S. Environmental Protection Agency (USEPA), and Shaw to discuss the ecological risk assessment. However, the regulators postponed the meeting to coordinate internally. The meeting will be

rescheduled when final comments are received from CTDEEP and USEPA. Final comments are anticipated to be issued in one month.

Groundwater Monitoring

Shaw conducted a site-wide groundwater sampling event on November 16 and 17, 2011 to further assess groundwater quality. Groundwater monitoring and sampling was completed at nine monitoring wells. Monitoring well locations are shown on the site plans (**Figures 1** and **2**). Monitoring well AOC1-MW1 was not sampled as planned during this event because it is no longer accessible due to SB-1 construction activities. In November 2011, the well was covered with a puddle in the middle of an active construction access road and could not be located with a magnetic locator. A list of the monitoring wells sampled and the analyses conducted is provided in the table below. Laboratory analysis was completed by Accutest Laboratories in Marlboro, Massachusetts.

Location	Laboratory Analysis November 16 and 17, 2011 Groundwater Monitoring Event		
	PAH	Metals	ETPH
TW-10		X	X
TW-14		X	X
TW-17D		X	
TW-18		X	
TW-21D	X	X	X
AOC2-SB1-MW1		X	
AOC8-SB1-MW1	X	X	X
AOC9-SB1-MW1		X	
AOC9-SB2-MW2	X	X	X

Notes:
1. Polycyclic aromatic hydrocarbons (PAH) including 2-methlynapthalene by EPA Method 8270C.
2. Metals including arsenic, lead, selenium, vanadium, and zinc by EPA Method 6010C.
3. Extractable petroleum hydrocarbons (ETPH) by CTDEEP Method.

During the groundwater sampling event, depth to groundwater was measured at each of the monitoring wells using an electronic interface probe (IP) capable of detecting light non-aqueous phase liquid (LNAPL). LNAPL was not detected in monitoring wells gauged during this event. Results of water level monitoring from November 2011 are summarized in **Table 1**.

During the November 2011 groundwater monitoring event, Shaw collected groundwater samples from the monitoring wells listed in the above table using a modified low flow sampling technique. No samples were field filtered. Each well was pumped at a rate that produced little or no drawdown while parameters including temperature, pH, dissolved oxygen, turbidity, and conductivity were monitored. Groundwater samples were then collected after the parameters stabilized to ensure that the groundwater sample was representative of local aquifer conditions. The final water quality parameters measured at each well are

summarized in **Table 2**. Laboratory analysis of each sample is noted in the table above. A complete laboratory analytical report (Report MC5615) is provided in **Attachment 1**.

The groundwater analytical results from the November 2011 sampling event are summarized and compared to applicable criteria in **Table 2**. Compounds detected in groundwater samples collected in November 2011 include the following:

- Acenaphthene was detected in the two groundwater and one field duplicate samples analyzed from AOC08-SB1-MW1 at 0.56 micrograms per liter (µg/L) and AOC09-SB2-MW2 at 0.11 µg/L (0.31 µg/L in the field duplicate);
- Fluorine was detected in the groundwater samples collected from AOC08-SB1-MW1 at 0.61 µg/L and AOC09-SB2-MW2 at 0.1 µg/L which are below the Connecticut Surface Water Protection Criteria (SWPC) of 140,000 µg/L;
- Phenanthrene was detected in one groundwater sample collected from AOC08-SB1-MW1 at 0.086 µg/L which is below the SWPC of 0.3 µg/L;
- ETPH was detected in three of the five groundwater samples analyzed including AOC09-SB2-MW2 at 0.835 milligrams per liter (mg/L) and AOC08-SB1-MW-1 (primary sample at 1.31 mg/L and field duplicate sample at 1.39 mg/L);
- Lead was detected in one groundwater sample (which was a field duplicate) at a concentration less than the SWPC of 13 µg/L (TW-18-DUP at 7.7 µg/L);
- Selenium was detected in two groundwater samples at concentrations greater than the SWPC of 50 µg/L (TW-17D at 63.6 µg/L and TW-21D at 77 µg/L) and was otherwise not detected;
- Vanadium was detected in three groundwater samples (one of which was a field duplicate) at a maximum concentration of 762 µg/L at TW-17D, and although there is no SWPC for vanadium, a point of reference is the MA GW-3 standard of 4,000 ug/L; and
- Zinc was detected in two groundwater samples (one of which was a field duplicate) at concentrations less than the SWPC of 123 µg/L (AOC9-SB2-MW2 at 42.3 µg/L and TW-18-DUP at 23.4. µg/L).

As provided in **Table 2**, two detections of selenium (TW-17D and TW-21D) in November 2011 were at concentrations greater than the SWPC. The November 2011 results for selenium are compared to the results from previous groundwater sampling events as shown in **Graph 1** of **Attachment 2**. As demonstrated by this graph, the average concentration of selenium in the groundwater plume is less than the SWPC, and has been for five consecutive events spanning four years. Selenium trends may not be representative because selenium was only detected in two wells, TW-17D and TW-21D. Selenium concentrations in groundwater samples collected from these two wells exhibit seasonal fluctuations with greater concentrations during fall/winter sampling events than in the spring. Although the selenium graph appears to indicate an increasing trend over time, this may not be a significant trend and may be the result of seasonal fluctuations. Selenium concentrations in groundwater samples collected from other wells continue to be non-detects. Historically, arsenic has been detected in individual wells at concentrations greater than the SWPC; however, the results were non-detect for arsenic in November 2011. For comparison purposes, the average concentration of arsenic in the groundwater plume is also provided in **Graph 2** of **Attachment 2**. Non-detect results are estimated at one-half of the laboratory reporting limit for calculation of the average concentration presented in the graphs. Historic groundwater analytical results for selenium and arsenic for wells included in the average concentration calculations

used in the graphs are provided in **Attachment 2**. Additional groundwater monitoring should be conducted to confirm potential trends in the selenium and arsenic plumes.

Laboratory analysis completed as part of these site activities was requested to be conducted in accordance with CTDEEP's Reasonable Confidence Protocol (RCP). The work completed during this reporting period was performed in general accordance with the site QAPP. Shaw performed data validation reviews for each laboratory report. The data validation work sheet is attached to the laboratory report included in **Attachment 1**. The laboratory analysis was completed in accordance with CTDEEP's RCP and no specific quality assurance/quality control (QA/QC) issues were identified in the RCP Form and laboratory report narrative. No data qualification is required. The data are acceptable for the purposes of this submittal.

SB-1 EC Complete

As reported in the previous status report, construction of the SB-1 EC was considered substantially complete on July 31, 2011 with the establishment of limited grass. Minor erosion repairs were completed in July and August while the vegetation was beginning to sprout. The vegetation was established in September 2011 at which time the SB-1 EC was considered complete.

SB-1 EC Inspections

As stated in Section 6.0 of the CTDEEP-approved EC, routine inspections of the EC should commence within 1 month of project completion and quarterly for the first year. Since the SB-1 EC was completed in September 2011, the facility has conducted periodic inspections of the SB-1 EC, including one month following completion of the EC (i.e., October 2011). The first routine quarterly inspection was conducted on January 19, 2012. During those inspections the EC was observed to be in good condition with no signs of a washout, erosion, or other failure. The remaining work in other areas of the site outlined in the RAP and EC submittals will be performed following procurement of the associated construction services. As-built plans for the SB-1 EC will be included in an EC completion report to detail the construction activities once site wide EC construction is complete.

SITE SCHEDULE

Outlined below is a site schedule that Middletown Power LLC and its parent company, NRG Energy Inc., expect to follow in the next two years. Except for the addition of the monitoring schedule items, the schedule is not changed from that presented in the RAP.

Activity	Anticipated Date
Initiate RAP (i.e., start of final remediation)	Q2 2012
RAP Complete (i.e., construction complete)	Q4 2012
RAP Completion Report	Q2 2013
Continued Groundwater Monitoring	Q2 and Q4 2012
Post Remediation Monitoring	2013

The schedule does not include the status of ongoing discussions between Shaw, NRG Energy Inc., CTDEEP, and USEPA for ecological risk assessment review. NRG Energy, Inc. will continue to provide updates on the status of response actions at the subject site on a semi-annual basis as requested by CTDEEP. Plans, submittals, and reports will be copied to the USEPA.

If you have any questions regarding this letter or any other matter, please do not hesitate to call me at 617.589.6143.

Sincerely,
Shaw Environmental & Infrastructure, Inc.

Andrew D. Walker, LEP, LSP
Project Manager

Enclosures:

Table 1 – Groundwater Gauging Data
Table 2 – November 2011 Groundwater Monitoring Analytical Report

Figure 1 – Site Plan – Western
Figure 2 – Site Plan - Eastern

Attachment 1 – Laboratory Analytical Report and Data Validation Worksheet for November 2011
Attachment 2 – Groundwater Trend Graphs for Selenium and Arsenic and Historical Groundwater Analytical Results

cc: Keith Shortsleeve, Middletown Power LLC
Robert Spooner, NRG (Electronic copy)
Juan Perez, USEPA (Electronic copy)

TABLES

TABLE 1
GROUNDWATER GAUGING DATA *02/14/12*
(11/16/11 - 11/17/11)

Middletown Power LLC
1866 River Road
Middletown, Connecticut

Location	Date	Reference Elevation (Feet)	Depth to Water (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Groundwater Elevation (Feet)	Notes
AOC02-SB1-MW1	11/16/11	28.02	25.03	--	--	2.99	DTB = 36.18'
AOC08-SB1-MW1	11/16/11	25.38	19.40	--	--	5.98	DTB = 32.00'
AOC09-SB1-MW1	11/16/11	27.39	24.47	--	--	2.92	DTB = 34.69'
AOC09-SB2-MW2	11/16/11	24.92	21.30	--	--	3.62	DTB = 34.51'
TW-10	11/17/11	32.60	26.90	--	--	5.70	DTB = 47.65'
TW-14	11/17/11	28.33	24.38	--	--	3.95	DTB = 46.58'
TW-17D	11/17/11	34.48	31.72	--	--	2.76	DTB = 41.85'
TW-18	11/17/11	36.92	33.60	--	--	3.32	DTB = 42.40'
TW-21D	11/17/11	34.42	31.65	--	--	2.77	Depth to Pump = 36.99'

Notes: -- = Not Detected NA = Not Available NM = Not Measured DTB = Depth to Bottom
<0.01 = Trace amount LNAPL detected

TABLE 2
NOVEMBER 2011 GROUNDWATER MONITORING ANALYTICAL REPORT

Middletown Power LLC
1866 River Road
Middletown, Connecticut

CONSTITUENT	CT I/C VC	CT ResVC	CT SWPC	AOC02-SB1-MW1 11/16/2011 Primary	AOC08-SB1-MW1 11/16/2011 Primary	AOC08-SB1-MW1 11/16/2011 Duplicate	AOC09-SB1-MW1 11/16/2011 Primary	AOC09-SB2-MW2 11/16/2011 Primary	AOC09-SB2-MW2 11/16/2011 Duplicate
SVOC (ug/L)									
Acenaphthene	NE	NE	NE	---	0.56	---	---	0.11	0.31
Acenaphthylene	NE	NE	0.3	---	<0.10	---	---	<0.10	<0.10
Anthracene	NE	NE	1100000	---	<0.10	---	---	<0.10	<0.10
Benzo(a)anthracene	NE	NE	0.3	---	<0.050	---	---	<0.050	<0.050
Benzo(a)pyrene	NE	NE	0.3	---	<0.10	---	---	<0.10	<0.10
Benzo(b)fluoranthene	NE	NE	0.3	---	<0.050	---	---	<0.050	<0.050
Benzo(ghi)perylene	NE	NE	---	---	<0.10	---	---	<0.10	<0.10
Benzo(k)fluoranthene	NE	NE	0.3	---	<0.10	---	---	<0.10	<0.10
Chrysene	NE	NE	NE	---	<0.10	---	---	<0.10	<0.10
Dibenzo(a,h)anthracene	NE	NE	NE	---	<0.10	---	---	<0.10	<0.10
Fluoranthene	NE	NE	3700	---	<0.10	---	---	<0.10	<0.10
Fluorene	NE	NE	140000	---	0.61	---	---	0.1	<0.10
Indeno(1,2,3-cd)pyrene	NE	NE	NE	---	<0.10	---	---	<0.10	<0.10
2-Methylnaphthalene	NE	NE	NE	---	<0.20	---	---	<0.20	<0.20
Naphthalene	NE	NE	NE	---	<0.10	---	---	<0.10	<0.10
Phenanthrene	NE	NE	0.3	---	0.086	---	---	<0.050	<0.050
Pyrene	NE	NE	110000	---	<0.10	---	---	<0.10	<0.10
ETPH (mg/L)									
ETPH	NE	NE	NE	---	1.31	1.39	---	0.835	---
Metals (ug/L)									
Arsenic	NE	NE	4	<4.0	<4.0	---	<4.0	<4.0	---
Lead	NE	NE	13	<5.0	<5.0	---	<5.0	<5.0	---
Selenium	NE	NE	50	<10	<10	---	<10	<10	---
Vanadium	NE	NE	NE	<10	<10	---	<10	<10	---
Zinc	NE	NE	123	<20	<20	---	<20	42.3	---
Field Parameters									
pH	NE	NE	NE	6.18	6.53	---	6.68	5.75	---
ORP (mV)	NE	NE	NE	144.2	-25.2	---	-131.8	89.6	---
Dissolved Oxygen (mg/L)	NE	NE	NE	3.06	1.24	---	1	1.08	---
Conductivity (ms/cm)	NE	NE	NE	0.294	0.226	---	0.621	1.116	---
Temperature (^{o}C)	NE	NE	NE	13.78	17.46	---	17.54	15.79	---
Turbidity (ntu)	NE	NE	NE	0.5	0.4	---	0.4	0.5	---

Notes:
--- = Constituent not analyzed for.
NE = Not established
ug/L = micrograms per liter
mg/L = milligrams per liter

I/C VC = Industrial/Commercial Volatilization Criteria
ResVC = Residential Volatilization Criteria
SWPC - Surface Water Protection Criteria
{BOLD} = > SWPC, I/C VC or ResVC

TABLE 2
NOVEMBER 2011 GROUNDWATER MONITORING ANALYTICAL REPORT

Middletown Power LLC
1866 River Road
Middletown, Connecticut

CONSTITUENT	CT I/C VC	CT ResVC	CT SWPC	TW-10 11/17/2011 Primary	TW-14 11/17/2011 Primary	TW-17D 11/17/2011 Primary	TW-18 11/17/2011 Primary	TW-18 11/17/2011 Duplicate	TW-21D 11/17/2011 Primary
SVOC (ug/L)									
Acenaphthene	NE	NE	NE	---	---	---	---	---	---
Acenaphthylene	NE	NE	0.3	---	---	---	---	---	---
Anthracene	NE	NE	1100000	---	---	---	---	---	---
Benzo(a)anthracene	NE	NE	0.3	---	---	---	---	---	---
Benzo(a)pyrene	NE	NE	0.3	---	---	---	---	---	---
Benzo(b)fluoranthene	NE	NE	0.3	---	---	---	---	---	---
Benzo(ghi)perylene	NE	NE	---	---	---	---	---	---	---
Benzo(k)fluoranthene	NE	NE	0.3	---	---	---	---	---	---
Chrysene	NE	NE	NE	---	---	---	---	---	---
Dibenzo(a,h)anthracene	NE	NE	NE	---	---	---	---	---	---
Fluoranthene	NE	NE	3700	---	---	---	---	---	---
Fluorene	NE	NE	140000	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	NE	NE	NE	---	---	---	---	---	---
2-Methylnaphthalene	NE	NE	NE	---	---	---	---	---	---
Naphthalene	NE	NE	NE	---	---	---	---	---	---
Phenanthrene	NE	NE	0.3	---	---	---	---	---	---
Pyrene	NE	NE	110000	---	---	---	---	---	---
ETPH (mg/L)									
ETPH	NE	NE	NE	<0.080	<0.080	---	---	---	---
Metals (ug/L)									
Arsenic	NE	NE	4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Lead	NE	NE	13	<5.0	<5.0	<5.0	<5.0	7.7	<5.0
Selenium	NE	NE	50	<10	<10	**{63.6}**	<10	<10	**{77.0}**
Vanadium	NE	NE	NE	<10	<10	762	50	53.7	<10
Zinc	NE	NE	123	<20	<20	<20	<20	23.4	<20
Field Parameters									
pH	NE	NE	NE	6.09	5.98	6.96	6.42	---	6.93
ORP (mV)	NE	NE	NE	-74.1	167.6	11	-66.3	---	83.2
Dissolved Oxygen (mg/L)	NE	NE	NE	0.86	0.88	2.07	0.92	---	1.23
Conductivity (ms/cm)	NE	NE	NE	0.272	0.165	1.095	0.638	---	1.195
Temperature (^{o}C)	NE	NE	NE	11.76	11.83	10.93	11.02	---	12.34
Turbidity (ntu)	NE	NE	NE	0.5	0.5	0.7	0.7	---	0.6

Notes:
--- = Constituent not analyzed for.
NE = Not established
ug/L = micrograms per liter
mg/L = milligrams per liter
I/C VC = Industrial/Commercial Volatilization Criteria
ResVC = Residential Volatilization Criteria
SWPC - Surface Water Protection Criteria
{BOLD} = > SWPC, I/C VC or ResVC

FIGURES

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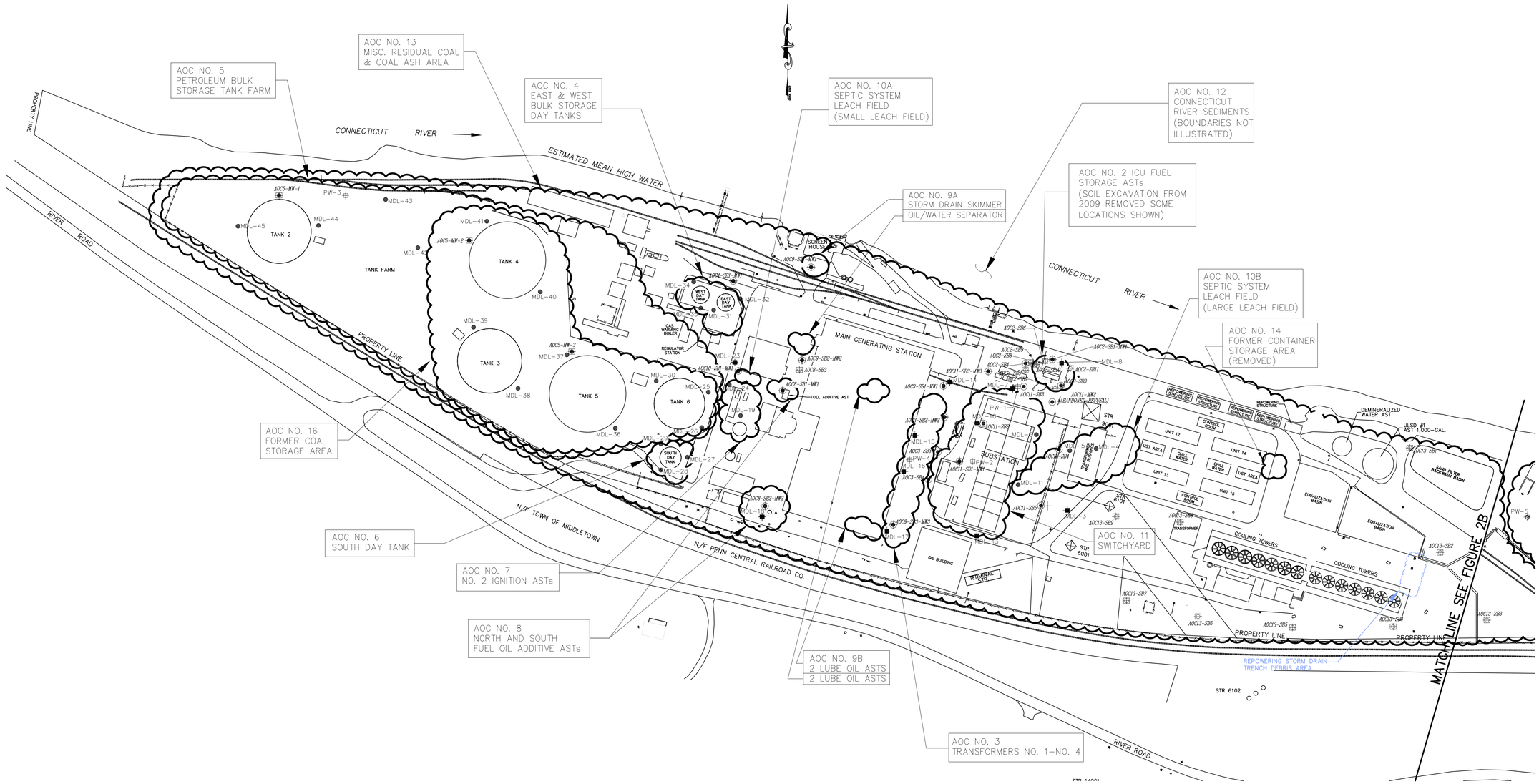

LEGEND:

- OAP–16, MDL–1, NRG–SB–1 — BORING LOCATIONS FROM PHASE II & SUPPLEMENTAL INVESTIGATION
- TW–14 — EXISTING MONITORING WELL LOCATIONS (RCRA COMPLIANCE MONITORING)
- AOC3–SB9 — LOCATION OF PHASE III SOIL BORINGS
- AOC7–SB–1/MW1 — LOCATION OF PHASE III SOIL BORING/MONITORING WELL
- MDL–13 — PROPOSED SOIL BORING FROM PHASE II INVESTIGATION (PHYSICAL RESTRAINTS OR UNDERGROUND UTILITY INTERFERENCE PREVENTED PLACEMENT OF BORING).
- PW–1 — PRODUCTION WELL
- ME–SED–03 — PHASE II SEDIMENT SAMPLE LOCATION (1999)
- AOC7A–HA4 — SUPPLEMENTAL PHASE III HAND AUGER SOIL SAMPLE LOCATION
- AOC1–SB2 — SHAW INSTALLED SOIL BORING
- AOC1–MW1 — SHAW INSTALLED MONITORING WELL
- NRG–G — MARCH 2008 SEDIMENT SAMPLE LOCATION
- EXISTING CHAIN LINK FENCE
- APPROXIMATE LIMITS OF AREA OF CONCERN

GRAPHIC SCALE
120' 0 60' 120' 240'
(IN FEET)
1 inch = 120 ft.

NOTES:

1.) "SITE PLAN–NRG MIDDLETOWN GENERATING STATION, MIDDLETOWN, CONNECTICUT", PREPARED BY NAFIS & YOUNG ENGINEERS, INC. LOCATED AT 1355 MIDDLETOWN AVENUE, NORTHFORD, CONNECTICUT. SCALE 1"=40', SHEET NO. 1, DATED NOVEMBER 13, 2003.

2.) "COMPILATION PLAN–MIDDLETOWN GENERATING STATION SEPARATION PLAN SHOWING LAND AND EASEMENT TO BE CONVEYED AND EASEMENT TO BE RESERVED MIDDLETOWN, CONNECTICUT" BY NORTHEAST UTILITIES SERVICE CO. FOR THE CONNECTICUT LIGHT AND POWER COMPANY. SCALE 1'=100', DRAWING NO. 21866 SHEET 1 AND 21866 SHEET 2. DATED 9–15–98.

3.) SEDIMENT SAMPLE LOCATION ME–SED–12 COLLECTED DURING THE PHASE II INVESTIGATION IN 1999 IS LOCATED 200 TO 300 FEET UPSTREAM OF WESTERN PROPERTY BOUNDARY.

4.) WESTERN PORTION OF SITE INCLUDES AOC2, AOC3, AOC4, AOC5, AOC6, AOC7, AOC8, AOC9A, AOC9B, AOC10A, AOC10B, AOC11, AOC13, AOC 14 AND AOC16.

5.) PRODUCTION WELL LOCATIONS FROM NORTHEAST UTILITIES SERVICE COMPANY RCRA "PART B" PLAN DATED MAY 10, 1985.

REFERENCES:

1] "AREAS OF CONCERN–EASTERN PORTION OF SITE" PREPARED BY METCALF & EDDY. DATED AUG. 2004. DWG# CZMID003A.DWG 2] "SAMPLE LOCATION PLAN–EASTERN PORTION OF SITE" PREPARED BY METCALF AND EDDY. DATED AUG. 2004. DWG# CZMID002A.DWG
2] SOIL BORING, MONITORING WELL, TOPOGRAPHIC AND WETLAND DELINEATION SURVEY BY A–PLUS CONSTRUCTION DATED MARCH 3, 2008, DWG: TOPO_SURVEY_030308

Shaw™ Shaw Environmental & Infrastructure, Inc.

DESIGNED BY: --	100 TECHNOLOGY CENTER DRIVE STOUGHTON, MASSACHUSETTS (617) 589-5111
DRAWN BY: CD	FIGURE 1 SITE PLAN - WESTERN NRG ENERGY, INC - MIDDLETOWN GENERATING STATION MIDDLETOWN, CONNECTICUT
CHECKED BY: AW	

APPROVED BY:	DATE:	SCALE:	DRAWING NO.	SHEET NO.
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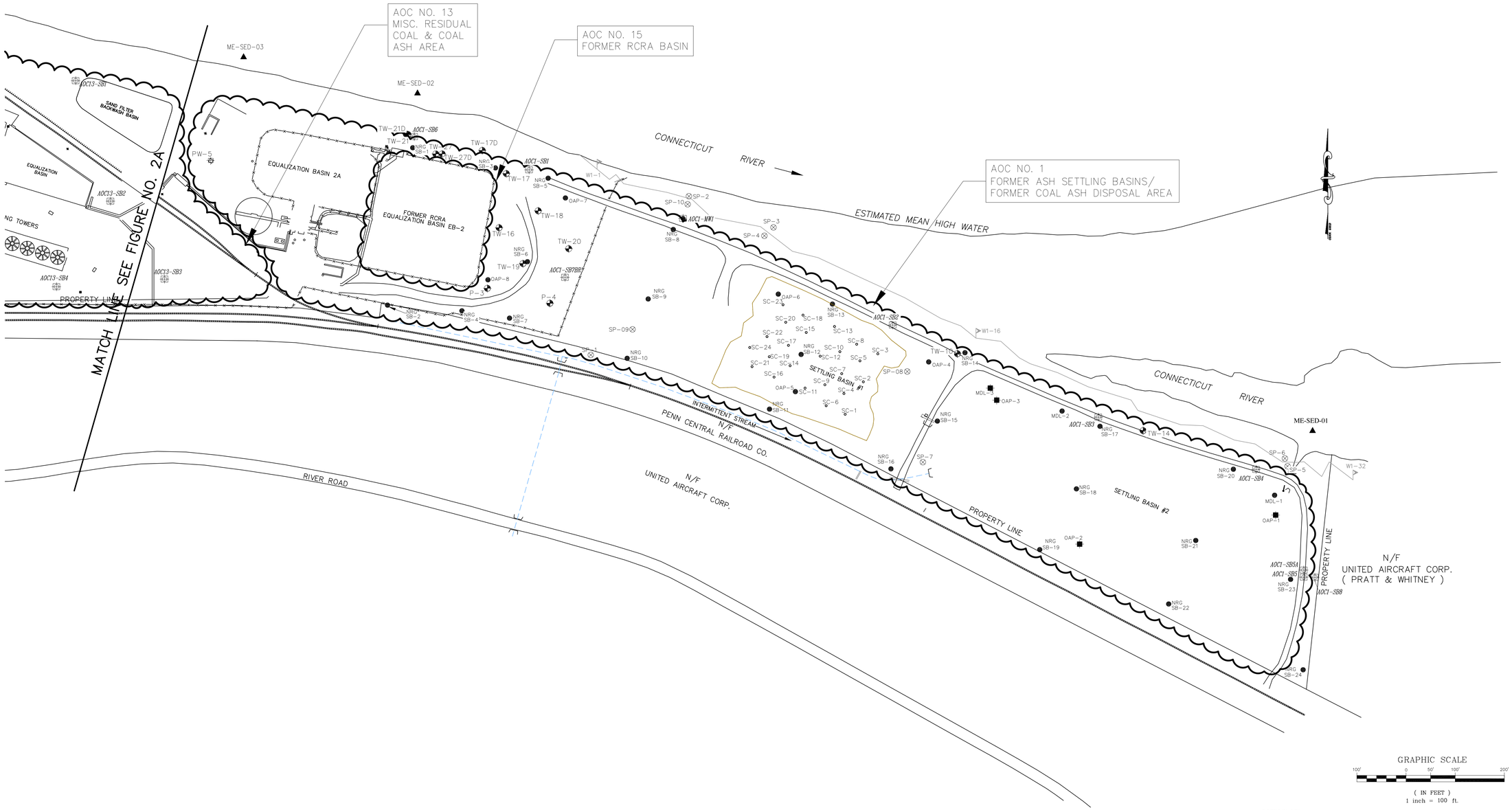


LEGEND:

OAP-6, MDL-1, NRG-SB-1	BORING LOCATIONS FROM PHASE II & SUPPLEMENTAL INVESTIGATION
TW-14	EXISTING MONITORING WELL LOCATIONS (RCRA COMPLIANCE MONITORING)
AOC3-SB9	LOCATION OF PHASE III SOIL BORINGS
AOC7-SB-1/MW1	LOCATION OF PHASE III SOIL BORING/MONITORING WELL
ME-SED-03	PHASE II SEDIMENT SAMPLE LOCATION
AOC7A-HA4	SUPPLEMENTAL PHASE III HAND AUGER SOIL SAMPLE LOCATION
MDL-1/OAP-3	PROPOSED SOIL BORING FROM PHASE II INVESTIGATION (PHYSICAL RESTRAINTS OR UNDERGROUND UTILITY INFERENCE PREVENTED PLACEMENT OF BORING).
PW-5	PRODUCTION WELL
AOC1-SB2	SHAW INSTALLED SOIL BORING
AOC1-MW1	SHAW INSTALLED MONITORING WELL
SP-1	WETLAND SAMPLE POINT
W1-1	WETLAND POINT
SC-1	SEDIMENT STOCKPILE SAMPLE LOCATION
	INTERMITTENT STREAM
	EXISTING CHAIN LINK FENCE
	WETLAND DELINEATION LINE
	APPROXIMATE LIMITS OF AREA OF CONCERN
	APPROXIMATE EXTENT OF SEDIMENT STOCKPILE BOUNDARY

NOTES:

1.) "SITE PLAN–NRG MIDDLETOWN GENERATING STATION, MIDDLETOWN, CONNECTICUT", PREPARED BY NAFIS & YOUNG ENGINEERS, INC. LOCATED AT 1355 MIDDLETOWN AVENUE, NORTHFORD, CONNECTICUT. SCALE 1"=40', SHEET NO. 1, DATED NOVEMBER 13, 2003.

2.) "COMPILATION PLAN–MIDDLETOWN GENERATING STATION SEPARATION PLAN SHOWING LAND AND EASEMENT TO BE CONVEYED AND EASEMENT TO BE RESERVED MIDDLETOWN, CONNECTICUT" BY NORTHEAST UTILITIES SERVICE CO. FOR THE CONNECTICUT LIGHT AND POWER COMPANY. SCALE 1"=100', DRAWING NO. 21866 SHEET 1 AND 21866 SHEET 2. DATED 9-15-98.

3.) SEDIMENT SAMPLE LOCATION ME-SED-12 COLLECTED DURING THE PHASE II INVESTIGATION IN 1999 IS LOCATED 200 TO 300 FEET UPSTREAM OF WESTERN PROPERTY BOUNDARY.

4.) EASTERN PORTION OF SITE INCLUDES AOC1 AND AOC15.

5.) PRODUCTION WELL LOCATIONS FROM NORTHEAST UTILITYS SERVICE COMPANY RCRA "PART B" PLAN DATED MAY 20, 1985.

REFERENCES:

1] "AREAS OF CONCERN–EASTERN PORTION OF SITE" PREPARED BY METCALF & EDDY. DATED AUG. 2004. DWG# CZMID003A.DWG 2] "SAMPLE LOCATION PLAN–EASTERN PORTION OF SITE" PREPARED BY METCALF AND EDDY. DATED AUG. 2004. DWG# CZMID002A.DWG
2] WETLANDS DELINEATION PERFORMED BY TONY FROONJIAN, WETLAND SCIENTIST, SHAW ENVIRONMENTAL.
3] SOIL BORING, MONITORING WELL, TOPOGRAPHIC, AND WETLAND DELINEATION SURVEY BY A–PLUS CONSTRUCTION DATED MARCH 3, 2008. DWG: TOPO_SURVEY_030308
4] "STOCK PILE VOLUME PLAN" BY A–PLUS CONSTRUCTION DATED OCTOBER, 2008.

Shaw™ Shaw Environmental & Infrastructure, Inc.

DESIGNED BY: --	88C ELM STREET HOPKINTON, MASSACHUSETTS (508) 435-9561			
DRAWN BY: CD	FIGURE 2 SITE PLAN - EASTERN NRG ENERGY, INC - MIDDLETOWN GENERATING STATION MIDDLETOWN, CONNECTICUT			
CHECKED BY: JM				
APPROVED BY: AW	DATE: 08/27/09	SCALE: AS SHOWN	DRAWING NO. 1009634004-01	SHEET NO. --

VERIFY SCALE 0 1"

File: N:\MISC\N.R.G\Middletown\1009634004-01.dwg Layout: SITEPLAN-B User: chris.desiata Nov 04, 2009 - 1:24pm

ATTACHMENT 1

New England ACCUTEST LABORATORIES

12/05/11

Technical Report for

Shaw Environmental & Infrastructure

NRG Middletown, Middletown, CT

1009634015-02

Accutest Job Number: MC5615

Sampling Dates: 11/16/11 - 11/17/11

Report to:

Shaw Environmental & Infrastructure
100 Technology Center Drive
Stoughton, MA 02072
andrew.walker@shawgrp.com; raymond.cadorette@shawgrp.com

ATTN: Andrew Walker

Total number of pages in report: **49**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Tand
Lab Director

Client Service contact: Frank DAgostino 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

Test results relate only to samples analyzed.

Sections: 1 2 3 4 5 6 7

Table of Contents

Accutest Laboratories

Sample Summary

Shaw Environmental & Infrastructure

Job No: MC5615

NRG Middletown, Middletown, CT
Project No: 1009634015-02

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC5615-1	11/16/11	08:30	DL	11/18/11	AQ	Ground Water	AOC9-SB2-MW2
MC5615-2	11/16/11	08:30	DL	11/18/11	AQ	Ground Water	AOC9-SB2-MW2 (DUP)
MC5615-3	11/16/11	09:40	DL	11/18/11	AQ	Ground Water	AOC9-SB1-MW1
MC5615-4	11/16/11	11:00	DL	11/18/11	AQ	Ground Water	AOC8-SB1-MW1
MC5615-5	11/16/11	11:00	DL	11/18/11	AQ	Ground Water	AOC8-SB1-MW1 (DUP)
MC5615-6	11/16/11	12:15	DL	11/18/11	AQ	Ground Water	AOC2-SB1-MW1
MC5615-7	11/17/11	08:50	DL	11/18/11	AQ	Ground Water	TW-14
MC5615-8	11/17/11	09:55	DL	11/18/11	AQ	Ground Water	TW-10
MC5615-9	11/17/11	11:20	DL	11/18/11	AQ	Ground Water	TW-18
MC5615-10	11/17/11	11:20	DL	11/18/11	AQ	Ground Water	TW-18 (DUP)
MC5615-11	11/17/11	12:40	DL	11/18/11	AQ	Ground Water	TW-17D
MC5615-12	11/17/11	13:55	DL	11/18/11	AQ	Ground Water	TW-21D
MC5615-13	11/17/11	14:10	DL	11/18/11	AQ	Ground Water	EB-1

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Shaw Environmental & Infrastructure	**Job No**	MC5615
Site:	NRG Middletown, Middletown, CT	**Report Date**	12/5/2011 9:18:36 AM

13 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on between 11/16/2011 and 11/17/2011 and were received at Accutest on 11/18/2011 properly preserved, at 1.7 Deg. C and intact. These Samples received an Accutest job number of MC5615. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP27009

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Only PAHs requested.

Extractables by GC By Method CT-ETPH 7/06

Matrix: AQ **Batch ID:** OP27010

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010C

Matrix: AQ **Batch ID:** MP18151

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC5551-15FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Lead, Selenium are outside control limits for sample MP18151-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Only selected metals requested.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(MC5615).

New England ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: AOC9-SB2-MW2
Lab Sample ID: MC5615-1
Matrix: AQ - Ground Water
Method: SW846 8270C BY SIM SW846 3510C
Project: NRG Middletown, Middletown, CT

Date Sampled: 11/16/11
Date Received: 11/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F53596.D	1	12/01/11	KR	11/21/11	OP27009	MSF2579
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	0.11	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	0.10	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	ug/l	
91-20-3	Naphthalene	ND	0.10	ug/l	
85-01-8	Phenanthrene	ND	0.050	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		30-130%
321-60-8	2-Fluorobiphenyl	65%		30-130%
1718-51-0	Terphenyl-d14	59%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AOC9-SB2-MW2
Lab Sample ID: MC5615-1
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: NRG Middletown, Middletown, CT

Date Sampled: 11/16/11
Date Received: 11/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG32335.D	1	11/24/11	AP	11/21/11	OP27010	GBG1171
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	0.835	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AOC9-SB2-MW2		
Lab Sample ID:	MC5615-1	**Date Sampled:**	11/16/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	42.3	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

Report of Analysis

Client Sample ID: AOC9-SB2-MW2 (DUP)
Lab Sample ID: MC5615-2
Matrix: AQ - Ground Water
Method: SW846 8270C BY SIM SW846 3510C
Project: NRG Middletown, Middletown, CT

Date Sampled: 11/16/11
Date Received: 11/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F53597.D	1	12/01/11	KR	11/21/11	OP27009	MSF2579
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	0.31	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	ug/l	
91-20-3	Naphthalene	ND	0.10	ug/l	
85-01-8	Phenanthrene	ND	0.050	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		30-130%
321-60-8	2-Fluorobiphenyl	71%		30-130%
1718-51-0	Terphenyl-d14	59%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AOC9-SB1-MW1		
Lab Sample ID:	MC5615-3	**Date Sampled:**	11/16/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	< 20	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

Report of Analysis

Client Sample ID: AOC8-SB1-MW1
Lab Sample ID: MC5615-4
Matrix: AQ - Ground Water
Method: SW846 8270C BY SIM SW846 3510C
Project: NRG Middletown, Middletown, CT

Date Sampled: 11/16/11
Date Received: 11/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F53598.D	1	12/01/11	KR	11/21/11	OP27009	MSF2579
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	0.56	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	0.61	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	ug/l	
91-20-3	Naphthalene	ND	0.10	ug/l	
85-01-8	Phenanthrene	0.086	0.050	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		30-130%
321-60-8	2-Fluorobiphenyl	67%		30-130%
1718-51-0	Terphenyl-d14	57%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: AOC8-SB1-MW1
Lab Sample ID: MC5615-4
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: NRG Middletown, Middletown, CT

Date Sampled: 11/16/11
Date Received: 11/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG32336.D	1	11/24/11	AP	11/21/11	OP27010	GBG1171
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	1.31	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AOC8-SB1-MW1		
Lab Sample ID:	MC5615-4	**Date Sampled:**	11/16/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	< 20	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

Report of Analysis

Client Sample ID: AOC8-SB1-MW1 (DUP)
Lab Sample ID: MC5615-5
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: NRG Middletown, Middletown, CT

Date Sampled: 11/16/11
Date Received: 11/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG32337.D	1	11/24/11	AP	11/21/11	OP27010	GBG1171
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	1.39	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	100%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AOC2-SB1-MW1		
Lab Sample ID:	MC5615-6	**Date Sampled:**	11/16/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	< 20	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

Report of Analysis

Client Sample ID: TW-14
Lab Sample ID: MC5615-7
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: NRG Middletown, Middletown, CT

Date Sampled: 11/17/11
Date Received: 11/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG32338.D	1	11/24/11	AP	11/21/11	OP27010	GBG1171
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-14		
Lab Sample ID:	MC5615-7	**Date Sampled:**	11/17/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	< 20	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

Report of Analysis

Client Sample ID: TW-10
Lab Sample ID: MC5615-8
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: NRG Middletown, Middletown, CT

Date Sampled: 11/17/11
Date Received: 11/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG32339.D	1	11/24/11	AP	11/21/11	OP27010	GBG1171
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-10		
Lab Sample ID:	MC5615-8	**Date Sampled:**	11/17/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	< 20	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TW-18		
Lab Sample ID:	MC5615-9	**Date Sampled:**	11/17/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	50.0	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	< 20	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TW-18 (DUP)		
Lab Sample ID:	MC5615-10	**Date Sampled:**	11/17/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	7.7	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	53.7	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	23.4	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TW-17D		
Lab Sample ID:	MC5615-11	**Date Sampled:**	11/17/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	63.6	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	762	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	< 20	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TW-21D		
Lab Sample ID:	MC5615-12	**Date Sampled:**	11/17/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	77.0	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	< 20	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

Report of Analysis

Client Sample ID: EB-1
Lab Sample ID: MC5615-13
Matrix: AQ - Ground Water
Method: SW846 8270C BY SIM SW846 3510C
Project: NRG Middletown, Middletown, CT

Date Sampled: 11/17/11
Date Received: 11/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F53599.D	1	12/01/11	KR	11/21/11	OP27009	MSF2579
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	ug/l	
91-20-3	Naphthalene	ND	0.10	ug/l	
85-01-8	Phenanthrene	ND	0.050	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		30-130%
321-60-8	2-Fluorobiphenyl	79%		30-130%
1718-51-0	Terphenyl-d14	40%		30-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: EB-1
Lab Sample ID: MC5615-13
Matrix: AQ - Ground Water
Method: CT-ETPH 7/06 SW846 3510C
Project: NRG Middletown, Middletown, CT

Date Sampled: 11/17/11
Date Received: 11/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BG32340.D	1	11/24/11	AP	11/21/11	OP27010	GBG1171
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	108%		50-149%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	EB-1		
Lab Sample ID:	MC5615-13	**Date Sampled:**	11/17/11
Matrix:	AQ - Ground Water	**Date Received:**	11/18/11
		Percent Solids:	n/a
Project:	NRG Middletown, Middletown, CT		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 4.0	4.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Vanadium	< 10	10	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]
Zinc	< 20	20	ug/l	1	11/21/11	11/21/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA13668
(2) Prep QC Batch: MP18151

RL = Reporting Limit

New England ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Certification Exceptions (CT)
- Chain of Custody
- RCP Form
- Sample Tracking Chronicle

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 1 OF 2

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: NRG Pricing List | Accutest Job #: MC5615

Client / Reporting Information

Company Name: Shaw Environmental, Inc.
Street Address: 100 Technology Center Dr.
City State Zip: Stoughton, MA 02072
Project Contact: Raymond Cadorette | E-mail:
Phone #: 617-589-6102 | Fax #:
Sampler(s) Name(s): Daniel C. Leahy 617-212-8276 | Phone #: Andrew Walker

Project Information

Project Name: NRG Middletown
Street:
City: Middletown, CT
Project#: 1009634015-02
Client PO#:
Project Manager:

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WIP - Wipe; FB Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	Metals (As, Pb, Se, V, Zn)	CT ETPH	PAH including 2-methyl naphthalene	LAB USE ONLY
-1	AOC9-SB2-MW2		11/16/11	0830	DL	GW	5			1		4					1	2	2	
-2	AOC9-SB2-MW2(DUP)		11/16/11	0830	DL		2					2							2	
-3	AOC9-SB1-MW1		11/16/11	0940	DL		1			1							1			
	~~AOC9-SB1-MW1 (DUP)~~		~~11/16/11~~	~~0940~~	~~DL~~		~~1~~			~~1~~							~~1~~	OC		
-4	AOC8-SB1-MW1		11/16/11	1100	DL		5			1		4					1	2	2	
-5	AOC8-SB1-MW1 (DUP)		11/16/11	1100	DL		2					2						2		
-6	AOC2-SB1-MW1		11/16/11	1215	DL		1			1							1			
-7	TW-14		11/17/11	0850	DL		3			1		2					1	2		
-8	TW-10		11/17/11	0955	DL		3			1		2					1	2		
-9	TW-18		11/17/11	1120	DL		1			1							1			
-10	TW-18 (DUP)		11/17/11	1120	DL		1			1							1			17A,GE
-11	TW-17D		11/17/11	1240	DL	V	1			1							1			

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [x] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format GISkey
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

* QA/QC: CTDEP RCP

Comments / Special Instructions

Please email GISkey formatted EDD & PDF to: Catherine.Mainville@Shawgrp.com
Site specific QAPP.
Detection limits must meet CT SWPC standards.

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	[signature]	11/18/11 0800	[signature]	2		2
3	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Intact / Not intact	Preserved where applicable	On ice	Cooler Temp. 1- 1.7 2- 2.0

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 2 OF 2

FED-EX Tracking #	Bottle Order Control #
Accutest Quote # NRG Pricing	Accutest Job # MC5615

Client / Reporting Information

- Company Name: Shaw Environmental, Inc.
- Street Address: 100 Technology Center Dr.
- City, State, Zip: Stoughton, MA 02072
- Project Contact: Raymond Cadorette
- Phone #: 617-589-6102
- Sampler(s) Name(s), Phone #: Daniel C. Leahy 617-212-8276

Project Information

- Project Name: NRG Middletown
- City: Middletown, CT
- Project#: 1009634015-02
- Project Manager: Andrew Walker

Billing Information (If different from Report to): Company Name, Street Address, City, State, Zip, Attention, PO#

Requested Analysis (see TEST CODE sheet): Metals (As, Pb, Se, V, Zn); CT ETPH; PAH including 2-Methyl naphthalene

Matrix Codes: DW - Drinking Water, GW - Ground Water, WW - Water, SW - Surface Water, SO - Soil, SL - Sludge, SED - Sediment, OI - Oil, LIQ - Other Liquid, AIR - Air, SOL - Other Solid, WP - Wipe, FB - Field Blank, EB - Equipment Blank, RB - Rinse Blank, TB - Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	Metals	CT ETPH	PAH	LAB USE ONLY
-12	TW-21D		11/17/11	1355	DL	GW	1			1							1			
-13	EB-1		11/17/11	1410	DL	LW	5			1		4					1	2	2	

Turnaround Time (Business days)

- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [x] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format GISKey
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

* QA/QC: CTDEP RCP

Comments / Special Instructions

Please email GISKey formatted EDD & PDF to: Catherine.Mainville@Shawgrp.com.
Site specific QAPP.
Detection limits must meet CT SWPC standards.

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	11/18/11 0800	1 [signature]	2		2
3		3	4		4
5		5	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable ☐ On Ice ☐ Cooler Temp. 1=1.7°C 2=2.0°C

MC5615: Chain of Custody
Page 2 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC5615 **Client:** SHAW **Immediate Client Services Action Required:** No

Date / Time Received: 11/18/2011 **Delivery Method:** **Client Service Action Required at Login:** No

Project: NRG MIDDLETOWN **No. Coolers:** 2 **Airbill #'s:** N/A

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **Accutest New England** **Client:** **Shaw Environmental & Infrastructure**

Project Location: **NRG Middletown, Middletown, CT** **Project Number:** **1009634015-02**

Sampling Date(s): **11/16/2011**

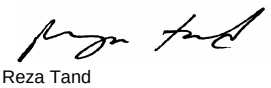
Laboratory Sample ID(s): MC5615-1, MC5615-2, MC5615-3, MC5615-4, MC5615-5, MC5615-6, MC5615-7, MC5615-8, MC5615-9, MC5615-10, MC5615-11, MC5615-12, MC5615-13

Methods: CT-ETPH 7/06, SW846 6010C, SW846 8270C BY SIM

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☑ No ☐
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☑ No ☐
	b) Were these reporting limits met?	Yes ☑ No ☐
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes ☐ No ☑
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature:  Position: Lab Director

Printed Name: Reza Tand Date: 12/5/2011

Accutest New England

Internal Sample Tracking Chronicle

Shaw Environmental & Infrastructure

Job No: MC5615

NRG Middletown, Middletown, CT
Project No: 1009634015-02

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC5615-1 Collected: 16-NOV-11 08:30 By: DL Received: 18-NOV-11 By: JB AOC9-SB2-MW2						
MC5615-1	SW846 6010C	21-NOV-11 18:45	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-1	CT-ETPH 7/06	24-NOV-11 18:08	AP	21-NOV-11	AJ	BCTTPH
MC5615-1	SW846 8270C BY SIM	01-DEC-11 17:47	KR	21-NOV-11	PA	B8270SIMPAH
MC5615-2 Collected: 16-NOV-11 08:30 By: DL Received: 18-NOV-11 By: JB AOC9-SB2-MW2 (DUP)						
MC5615-2	SW846 8270C BY SIM	01-DEC-11 18:18	KR	21-NOV-11	PA	B8270SIMPAH
MC5615-3 Collected: 16-NOV-11 09:40 By: DL Received: 18-NOV-11 By: JB AOC9-SB1-MW1						
MC5615-3	SW846 6010C	21-NOV-11 18:49	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-4 Collected: 16-NOV-11 11:00 By: DL Received: 18-NOV-11 By: JB AOC8-SB1-MW1						
MC5615-4	SW846 6010C	21-NOV-11 18:54	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-4	CT-ETPH 7/06	24-NOV-11 18:45	AP	21-NOV-11	AJ	BCTTPH
MC5615-4	SW846 8270C BY SIM	01-DEC-11 18:51	KR	21-NOV-11	PA	B8270SIMPAH
MC5615-5 Collected: 16-NOV-11 11:00 By: DL Received: 18-NOV-11 By: JB AOC8-SB1-MW1 (DUP)						
MC5615-5	CT-ETPH 7/06	24-NOV-11 19:22	AP	21-NOV-11	AJ	BCTTPH
MC5615-6 Collected: 16-NOV-11 12:15 By: DL Received: 18-NOV-11 By: JB AOC2-SB1-MW1						
MC5615-6	SW846 6010C	21-NOV-11 18:58	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-7 Collected: 17-NOV-11 08:50 By: DL Received: 18-NOV-11 By: JB TW-14						
MC5615-7	SW846 6010C	21-NOV-11 19:03	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-7	CT-ETPH 7/06	24-NOV-11 19:59	AP	21-NOV-11	AJ	BCTTPH

Internal Sample Tracking Chronicle

Shaw Environmental & Infrastructure

Job No: MC5615

NRG Middletown, Middletown, CT
Project No: 1009634015-02

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC5615-8 TW-10	Collected: 17-NOV-11 09:55 By: DL			Received: 18-NOV-11	By: JB	
MC5615-8	SW846 6010C	21-NOV-11 19:07	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-8	CT-ETPH 7/06	24-NOV-11 20:37	AP	21-NOV-11	AJ	BCTTPH
MC5615-9 TW-18	Collected: 17-NOV-11 11:20 By: DL			Received: 18-NOV-11	By: JB	
MC5615-9	SW846 6010C	21-NOV-11 19:11	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-10 TW-18 (DUP)	Collected: 17-NOV-11 11:20 By: DL			Received: 18-NOV-11	By: JB	
MC5615-10	SW846 6010C	21-NOV-11 19:16	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-11 TW-17D	Collected: 17-NOV-11 12:40 By: DL			Received: 18-NOV-11	By: JB	
MC5615-11	SW846 6010C	21-NOV-11 19:29	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-12 TW-21D	Collected: 17-NOV-11 13:55 By: DL			Received: 18-NOV-11	By: JB	
MC5615-12	SW846 6010C	21-NOV-11 19:33	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-13 EB-1	Collected: 17-NOV-11 14:10 By: DL			Received: 18-NOV-11	By: JB	
MC5615-13	SW846 6010C	21-NOV-11 19:37	DA	21-NOV-11	DA	AS,PB,SE,V,ZN
MC5615-13	CT-ETPH 7/06	24-NOV-11 21:14	AP	21-NOV-11	AJ	BCTTPH
MC5615-13	SW846 8270C BY SIM	01-DEC-11 19:17	KR	21-NOV-11	PA	B8270SIMPAH

New England ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC5615
Account: FDG Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP27009-MB	F53594.D	1	12/01/11	KR	11/21/11	OP27009	MSF2579

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

MC5615-1, MC5615-2, MC5615-4, MC5615-13

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.10	ug/l	
208-96-8	Acenaphthylene	ND	0.10	ug/l	
120-12-7	Anthracene	ND	0.10	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.050	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.050	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	ug/l	
218-01-9	Chrysene	ND	0.10	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	ug/l	
206-44-0	Fluoranthene	ND	0.10	ug/l	
86-73-7	Fluorene	ND	0.10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.20	ug/l	
91-20-3	Naphthalene	ND	0.10	ug/l	
85-01-8	Phenanthrene	ND	0.050	ug/l	
129-00-0	Pyrene	ND	0.10	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	90%	30-130%
321-60-8	2-Fluorobiphenyl	72%	30-130%
1718-51-0	Terphenyl-d14	79%	30-130%

Blank Spike Summary

Job Number: MC5615
Account: FDG Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP27009-BS	F53595.D	1	12/01/11	KR	11/21/11	OP27009	MSF2579

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

MC5615-1, MC5615-2, MC5615-4, MC5615-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	41.9	84	40-140
208-96-8	Acenaphthylene	50	28.0	56	40-140
120-12-7	Anthracene	50	41.1	82	40-140
56-55-3	Benzo(a)anthracene	50	43.8	88	40-140
50-32-8	Benzo(a)pyrene	50	33.7	67	40-140
205-99-2	Benzo(b)fluoranthene	50	39.4	79	40-140
191-24-2	Benzo(g,h,i)perylene	50	31.8	64	40-140
207-08-9	Benzo(k)fluoranthene	50	42.3	85	40-140
218-01-9	Chrysene	50	42.5	85	40-140
53-70-3	Dibenzo(a,h)anthracene	50	33.9	68	40-140
206-44-0	Fluoranthene	50	42.0	84	40-140
86-73-7	Fluorene	50	45.5	91	40-140
193-39-5	Indeno(1,2,3-cd)pyrene	50	33.1	66	40-140
91-57-6	2-Methylnaphthalene	50	38.5	77	40-140
91-20-3	Naphthalene	50	40.5	81	40-140
85-01-8	Phenanthrene	50	43.5	87	40-140
129-00-0	Pyrene	50	47.9	96	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	92%	30-130%
321-60-8	2-Fluorobiphenyl	80%	30-130%
1718-51-0	Terphenyl-d14	73%	30-130%

Semivolatile Internal Standard Area Summary

Job Number: MC5615
Account: FDG Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

Check Std: MSF2579-CC2577 **Injection Date:** 12/01/11
Lab File ID: F53593.D **Injection Time:** 16:14
Instrument ID: GCMSF **Method:** SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	101718	5.44	366564	6.73	184144	9.20	331175	11.70	383359	16.67	376510	19.20
Upper Limit [a]	203436	5.94	733128	7.23	368288	9.70	662350	12.20	766718	17.17	753020	19.70
Lower Limit [b]	50859	4.94	183282	6.23	92072	8.70	165588	11.20	191680	16.17	188255	18.70
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP27009-MB	132794	5.44	472321	6.73	231960	9.20	421401	11.70	428434	16.66	422898	19.20
OP27009-BS	125479	5.44	444536	6.73	224174	9.20	388545	11.70	436124	16.67	412883	19.20
MC5615-1	102381	5.44	373224	6.73	183615	9.20	332658	11.70	356910	16.66	363348	19.20
MC5615-2	114626	5.44	418760	6.73	209220	9.20	376573	11.70	388304	16.66	385739	19.20
MC5615-4	105542	5.44	370564	6.72	183222	9.20	332352	11.70	362701	16.66	368139	19.20
MC5615-13	101930	5.44	367264	6.73	179361	9.20	321592	11.70	339058	16.66	335052	19.20
OP27031-MS	94608	5.44	341384	6.73	165062	9.20	295469	11.70	321897	16.66	309231	19.20
OP27031-MSD	91694	5.44	330771	6.73	165756	9.20	295779	11.70	312921	16.66	308433	19.20
MC5686-1F	92272	5.44	325969	6.72	160694	9.20	287126	11.70	298966	16.66	301063	19.20
ZZZZZZ	94616	5.44	338885	6.73	164170	9.20	293456	11.70	306965	16.66	306385	19.20
ZZZZZZ	81860	5.44	297783	6.73	145388	9.20	261247	11.70	278529	16.66	286771	19.20
ZZZZZZ	81063	5.44	307503	6.73	149380	9.20	271306	11.70	284377	16.66	287062	19.20
ZZZZZZ	85090	5.44	310698	6.73	147965	9.20	264543	11.69	283521	16.66	301444	19.20
ZZZZZZ	90618	5.44	323517	6.74	152583	9.20	275717	11.70	292881	16.66	302011	19.19
ZZZZZZ	86223	5.44	305208	6.73	144072	9.20	260027	11.70	275448	16.66	293868	19.19
ZZZZZZ	84188	5.44	303511	6.73	147199	9.20	262457	11.70	285445	16.66	295581	19.19
ZZZZZZ	75835	5.44	274399	6.73	134436	9.20	247145	11.70	269714	16.66	286467	19.20
ZZZZZZ	81637	5.44	293779	6.73	145458	9.20	270700	11.70	282648	16.66	293379	19.20
ZZZZZZ	80140	5.44	288713	6.72	145230	9.20	260872	11.70	265512	16.66	280156	19.20
ZZZZZZ	93056	5.44	332217	6.73	163693	9.20	293074	11.70	307086	16.66	320362	19.19
ZZZZZZ	78641	5.44	293472	6.73	140806	9.18	260707	11.70	270661	16.66	284874	19.20

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: MC5615
Account: FDG Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

Method: SW846 8270C BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC5615-1	F53596.D	73.0	65.0	59.0
MC5615-2	F53597.D	79.0	71.0	59.0
MC5615-4	F53598.D	75.0	67.0	57.0
MC5615-13	F53599.D	84.0	79.0	40.0
OP27009-BS	F53595.D	92.0	80.0	73.0
OP27009-MB	F53594.D	90.0	72.0	79.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	30-130%
S2 = 2-Fluorobiphenyl	30-130%
S3 = Terphenyl-d14	30-130%

New England ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC5615
Account: FDG Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP27010-MB	BG32333.D	1	11/24/11	AP	11/21/11	OP27010	GBG1171

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

MC5615-1, MC5615-4, MC5615-5, MC5615-7, MC5615-8, MC5615-13

CAS No.	Compound	Result	RL	Units	Q
	CT-ETPH (C9-C36)	ND	0.080	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	103%	50-149%

Blank Spike Summary

Job Number: MC5615
Account: FDG Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP27010-BS	BG32334.D	1	11/24/11	AP	11/21/11	OP27010	GBG1171

The QC reported here applies to the following samples: **Method:** CT-ETPH 7/06

MC5615-1, MC5615-4, MC5615-5, MC5615-7, MC5615-8, MC5615-13

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	CT-ETPH (C9-C36)	0.7	0.680	97	60-120

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	107%	50-149%

Semivolatile Surrogate Recovery Summary

Job Number: MC5615
Account: FDG Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

Method: CT-ETPH 7/06 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC5615-1	BG32335.D	97.0
MC5615-4	BG32336.D	86.0
MC5615-5	BG32337.D	100.0
MC5615-7	BG32338.D	94.0
MC5615-8	BG32339.D	98.0
MC5615-13	BG32340.D	108.0
OP27010-BS	BG32334.D	107.0
OP27010-MB	BG32333.D	103.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	50-149%

(a) Recovery from GC signal #1

New England ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC5615
Account: FDG - Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

QC Batch ID: MP18151
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/21/11

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	21	40		
Antimony	6.0	1.1	2		
Arsenic	4.0	.9	1.1	-0.10	<4.0
Barium	50	1.5	1		
Beryllium	4.0	.28	.28		
Boron	100	.45	1.8		
Cadmium	4.0	.11	.18		
Calcium	5000	15	26		
Chromium	10	.72	.72		
Cobalt	50	.14	.22		
Copper	25	.64	2.5		
Gold	50	1.3	2.9		
Iron	100	12	12		
Lead	5.0	1.2	1.4	-0.60	<5.0
Magnesium	5000	74	110		
Manganese	15	.18	.43		
Molybdenum	100	.4	.4		
Nickel	40	.19	.35		
Palladium	50	2.1	3.4		
Platinum	50	7.8	15		
Potassium	5000	63	63		
Selenium	10	1.3	2.1	0.10	<10
Silicon	100	2.1	18		
Silver	5.0	.8	1		
Sodium	5000	24	41		
Strontium	10	.25	.38		
Thallium	5.0	.56	.88		
Tin	100	.38	.47		
Titanium	50	.48	1		
Tungsten	100	5.7	13		
Vanadium	10	.93	1.5	-0.10	<10
Zinc	20	.34	.61	0.10	<20

Associated samples MP18151: MC5615-1, MC5615-3, MC5615-4, MC5615-6, MC5615-7, MC5615-8, MC5615-9, MC5615-10, MC5615-11, MC5615-12, MC5615-13

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC5615
Account: FDG - Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

QC Batch ID: MP18151
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC5615
Account: FDG - Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

QC Batch ID: MP18151
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:		11/21/11				11/21/11			
Metal	BSP Result	Spikelot MPICP	% Rec	QC Limits	BSD Result	Spikelot MPICP	% Rec	BSD RPD	QC Limit
Aluminum	anr								
Antimony	anr								
Arsenic	496	500	99.2	80-120	503	500	100.6	1.4	20
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Gold									
Iron	anr								
Lead	977	1000	97.7	80-120	999	1000	99.9	2.2	20
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Palladium									
Platinum									
Potassium	anr								
Selenium	495	500	99.0	80-120	505	500	101.0	2.0	20
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	502	500	100.4	80-120	487	500	97.4	3.0	20
Zinc	507	500	101.4	80-120	515	500	103.0	1.6	20

Associated samples MP18151: MC5615-1, MC5615-3, MC5615-4, MC5615-6, MC5615-7, MC5615-8, MC5615-9, MC5615-10, MC5615-11, MC5615-12, MC5615-13

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC5615
Account: FDG - Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

QC Batch ID: MP18151
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC5615
Account: FDG - Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

QC Batch ID: MP18151
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/21/11

Metal	MC5551-15F Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Gold				
Iron	anr			
Lead	1.30	0.00	100.0(a)	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Palladium				
Platinum				
Potassium	anr			
Selenium	4.30	10.0	132.6(a)	0-10
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	0.00	0.00	NC	0-10
Zinc	187	195	4.5	0-10

Associated samples MP18151: MC5615-1, MC5615-3, MC5615-4, MC5615-6, MC5615-7, MC5615-8, MC5615-9, MC5615-10, MC5615-11, MC5615-12, MC5615-13

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC5615
Account: FDG - Shaw Environmental & Infrastructure
Project: NRG Middletown, Middletown, CT

QC Batch ID: MP18151
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Data Validation Worksheet

Project Name : NRG Middletown, CT

Job Number : 1009634015

Date:12/16/2011

Validated By: Kim Napier

Date:12/19/2011

Analyte Group :

SVOC
Extractable Total Petroleum Hydrocarbons
Metals

Analytical Method :

EPA 8270C
CT ETPH
EPA 6010C

Completed Reasonable Confidence Protocols Certification Form included: Yes

Were all Reasonable Confidence Protocol QA/QC Criteria Followed? Yes
*Question 6 was answered No

Accutest laboratory certifies that all analysis were performed within method specifications and recommends that the report is to be used in its entirety: Yes

Laboratory ID No. : MC5615

Chain of Custody: Included in Data Package ? Yes

Is it Complete ? Yes

Allowable Holding Time : All Holding times were met.

Method	Extraction	Analysis	Collection Date	Extraction date	Analyzed Date
SVOC/8270C	7-Days	7 days (water) 14 days (soil)	11/16, 11/17/2011	11/21/2011	12/1/2011
ETPH/CT ETPH	7-Days	40 Days (water) 14 Days (soil)	11/16, 11/17/2012	11/21/2011	11/24/2011
Metals/6010C	NA	6 months	11/16, 11/17/2013	NA	11/21/2011

Sample Collection Date : 11/16, 11/17/2011

Sample temperature above QC limit: No (1.7°)

Surrogate Recovery

Surrogate Allowable Ranges for GC/MS SVOCs:

Are all % recoveries within the allowable range ? Yes

If No, List sample ID where range was exceeded: NA

Surrogate Allowable Ranges for GC SVOCs:

Are all % recoveries within the allowable range ? Yes

If No, List sample ID where range was exceeded: NA

Laboratory Control Samples

LCS/LCSD

Are all laboratory control sample recoveries within the QC limits ? Yes

If No, list sample ID and compound where limit was exceeded: NA

MS/MSD

Are all MS/MSD sample recoveries within the QC limits ? Yes
If No, list sample ID and compound where limit was exceeded:

Equipment Field Blank ID : EB-1 (11/17/2011)
Trip Blank ID : NA
Method Blank: SVOC/8270C (12/01/2011) ETPH (11/24/2011) 6010C (11/21/2011)

Were any compounds identified in the method blank, field blank or trip blank above detection limits ? No

If so, list Sample ID/Compound/Concentration/Units:

Sample Analysis Notes by Method:

SW846 8270C
None

CT-ETPH 7/06
None

SW846 6010C
Sample(s) MC5551-15FSDL were used as the QC samples for metals.

RPD(s) for Serial Dilution for Lead, Selenium are outside control limits for sample MP18151-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
No qualification necessary

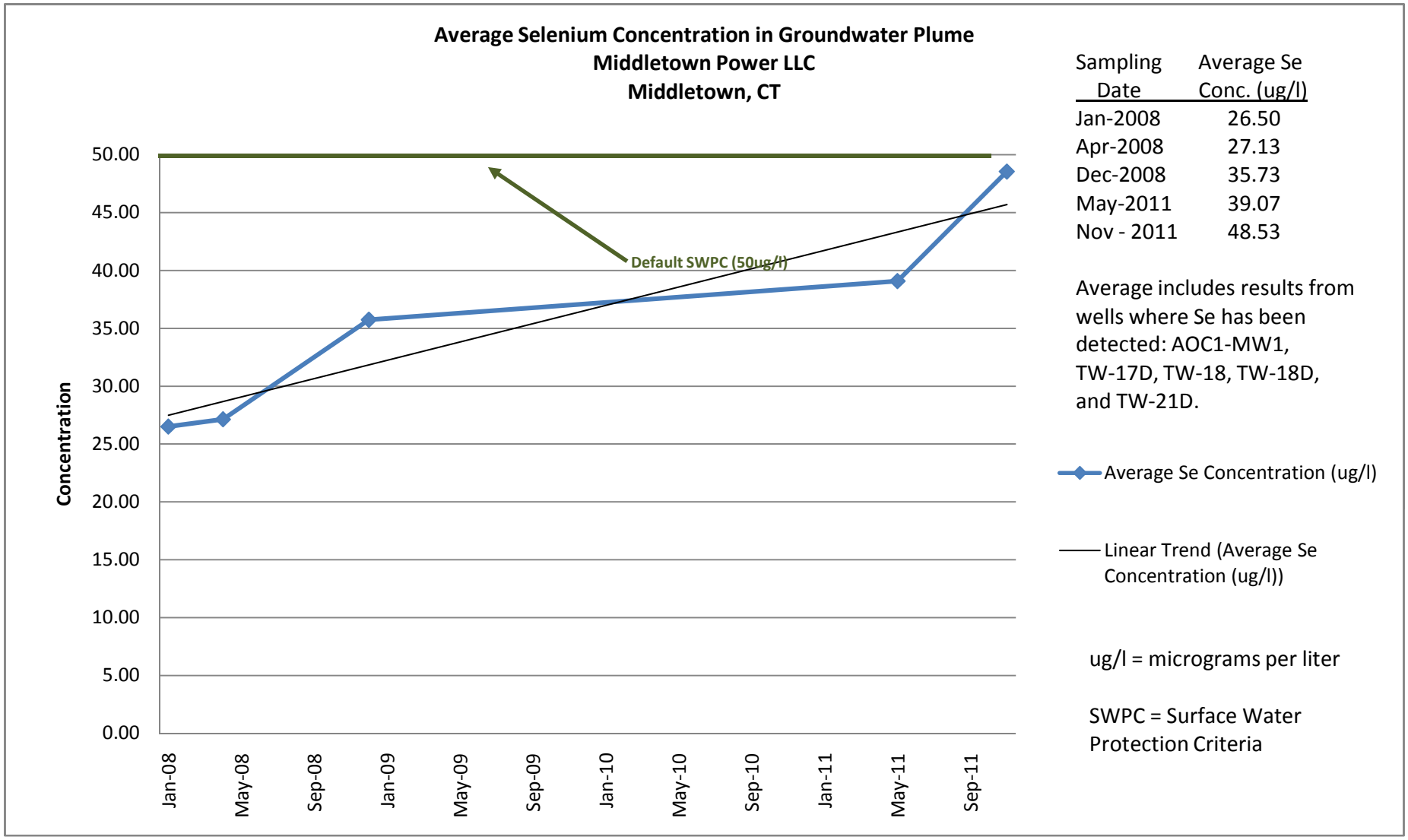
Sample ID correction

Reviewed By:

No qualification of the data necessary. Data acceptable as reported.

ATTACHMENT 2

Attachment 2
Graph 1



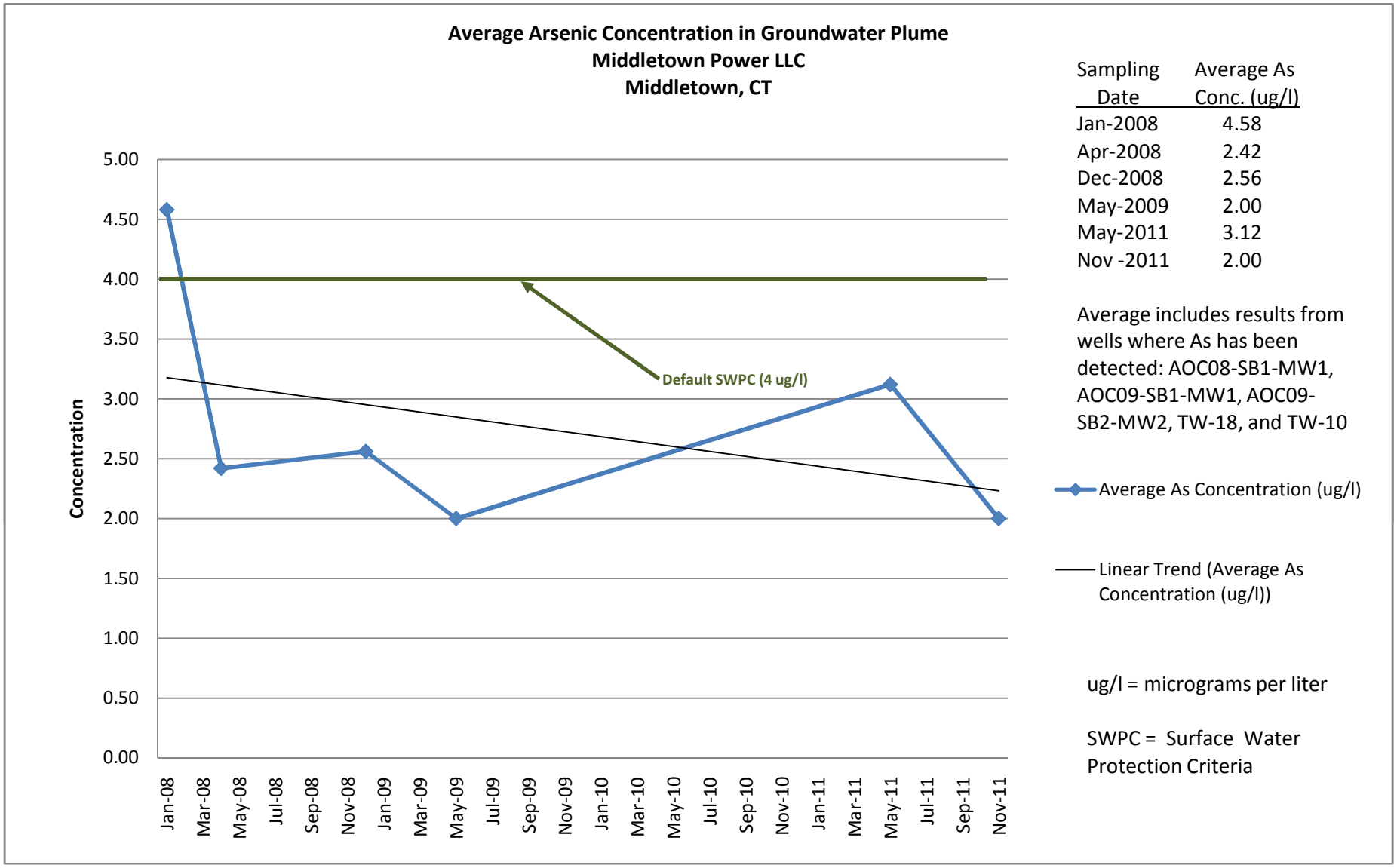
Sampling Date	Average Se Conc. (ug/l)
Jan-2008	26.50
Apr-2008	27.13
Dec-2008	35.73
May-2011	39.07
Nov - 2011	48.53

Average includes results from wells where Se has been detected: AOC1-MW1, TW-17D, TW-18, TW-18D, and TW-21D.

ug/l = micrograms per liter

SWPC = Surface Water Protection Criteria

Attachment 2
Graph 2



Sampling Date	Average As Conc. (ug/l)
Jan-2008	4.58
Apr-2008	2.42
Dec-2008	2.56
May-2009	2.00
May-2011	3.12
Nov -2011	2.00

Average includes results from wells where As has been detected: AOC08-SB1-MW1, AOC09-SB1-MW1, AOC09-SB2-MW2, TW-18, and TW-10

ug/l = micrograms per liter

SWPC = Surface Water Protection Criteria

Historical Groundwater Analytical Results
Arsenic and Selenium
Middletown Power LLC
Middletown, CT

SITE_ID	DATE	Arsenic Total (ug/l)	Selenium Total (ug/l)
SWPC		**4**	**50**
AOC01-MW1	1/16/2008	<4.0	16.3
AOC01-MW1	4/22/2008	<4.0	12.2
AOC01-MW1	12/4/2008	<4.0	<10
AOC08-SB1-MW1	1/17/2008	**{4.1}**	<10
AOC08-SB1-MW1	4/23/2008	<4.0	<10
AOC08-SB1-MW1	12/3/2008	<4.0	<10
AOC08-SB1-MW1	5/21/2009	<4.0	<10
AOC08-SB1-MW1	5/16/2011	<4.0	<10
AOC08-SB1-MW1	11/16/2011	<4.0	<10
AOC09-SB1-MW1	1/17/2008	**{7.1}**	<10
AOC09-SB1-MW1	4/23/2008	<4.0	<10
AOC09-SB1-MW1 (Dupe)	4/23/2008	<4.0	<10
AOC09-SB1-MW1	12/4/2008	<4.0	<10
AOC09-SB1-MW1 (Dupe)	12/4/2008	**{4.8}**	<10
AOC09-SB1-MW1	5/21/2009	<4.0	<10
AOC09-SB1-MW1 (Dupe)	5/21/2009	<4.0	<10
AOC09-SB1-MW1	5/16/2011	<4.0	<10
AOC09-SB1-MW1 (Dupe)	5/16/2011	<4.0	<10
AOC09-SB1-MW1	11/16/2011	<4.0	<10
AOC09-SB2-MW2	1/17/2008	**{5.1}**	<10
AOC09-SB2-MW2	4/23/2008	<4.0	<10
AOC09-SB2-MW2	12/4/2008	<4.0	<10
AOC09-SB2-MW2	5/22/2009	<4.0	<10
AOC09-SB2-MW2	5/16/2011	<4.0	<10
AOC09-SB2-MW2	11/16/2011	<4.0	<10
TW-10	1/16/2008	<4.0	<10
TW-10	4/22/2008	<4.0	<10
TW-10	12/3/2008	<4.0	<10
TW-10	5/22/2009	<4.0	<10
TW-10	5/16/2011	**{5.5}**	<10
TW-10	11/17/2011	<4.0	<10
TW-17D	4/22/2008	<4.0	45.1
TW-17D	12/3/2008	<4.0	**{59.3}**
TW-17D	5/16/2011	<4.0	**{53.2}**
TW-17D	11/17/2011	<4.0	**{63.6}**
TW-18D	1/17/2008	<4.0	<10
TW-18	4/22/2008	**{4.1}**	15.7
TW-18	12/3/2008	<4.0	13.4
TW-18	5/16/2011	**{4.1}**	15.4
TW-18	11/17/2011	<4.0	<10
TW-18 (Dupe)	11/17/2011	<4.0	<10
TW-21D	1/16/2008	<4.0	**{58.2}**
TW-21D	4/22/2008	<4.0	35.5
TW-21D	12/3/2008	<4.0	**{65.2}**
TW-21D	5/16/2011	<4.0	48.6
TW-21D	11/17/2011	<4.0	**{77.0}**

Notes:
SWPC = CT Surface Water Protection Criteria
ug/l = micrograms per liter
{BOLD} = Result exceeds SWPC